STEPPING STONE
SCHOOL (HIGH)

CLASS: 7

Subject: Mathematics. Date: 04/05/2020.

Topic:Fraction(Addition&Subtraction) Time Limit:30 min.

Worksheet No. :7

[Copy the questions and solve them on a sheet of paper date wise. Keep the worksheets ready in a file to be submitted on the opening day.]

Introduction:-

We have already learnt about fractions, type of fractions, their comparison, equivalent fraction, as well as their addition and subtraction in class 6. Frist of all we have to revise what we have done in previous class.

Types of Fractions

Proper Fractions
Numerator (top number) is smaller than Denominator (bottom number) $\frac{1}{3}$ $\frac{5}{8}$

Improper Fractions
Numerator is larger than Denominator $\frac{7}{3}$ $\frac{4}{3}$

Mixed Numbers
Whole number and a fraction $3\frac{5}{7}$ $2\frac{4}{9}$

Some examples for Recap -

1. **$2 - \frac{3}{5} = \frac{2}{1} - \frac{3}{5}$**

   LCM of 1 & 5 = 5

   Now, $\frac{2X5}{1X5} - \frac{3X1}{5X1} = \frac{10}{5} - \frac{3}{5}$

$= \frac{10-3}{5} = \frac{7}{5}$ *or* $1\frac{2}{5}$.

2. $8\frac{1}{2} - 3\frac{5}{8} = \frac{17}{2} - \frac{29}{8} = \frac{17X4 - 29X1}{8} = \frac{68-29}{8} = \frac{39}{8}$ or $4\frac{7}{8}$

3. $\frac{2}{3} - \frac{4}{7} + \frac{12}{5}$

   LCM of 3, 7 and 5 is 105

   Now, $\frac{2}{3} - \frac{4}{7} + \frac{12}{5} = \frac{2X35}{3X35} - \frac{4X15}{7X15} + \frac{12X21}{5X21}$

   $= \frac{70}{105} - \frac{60}{105} + \frac{252}{105} = \frac{70-60+252}{105}$

   $= \frac{262}{105} = 2\frac{52}{105}$.

4. $\frac{2}{9}, \frac{2}{3}, \frac{8}{21}$ **arrange in descending order.**

   LCM of 9, 3, 21 = 3X3X7 = 63

   Now, we will write each fraction in such a way that they have same denominator = 63

$$\frac{2}{9} = \frac{2X7}{9X7} = \frac{14}{63}$$

$$\frac{2}{3} = \frac{2X21}{3X21} = \frac{42}{63}$$

$$\frac{8}{21} = \frac{8X3}{21X3} = \frac{24}{63}$$

Clearly, 42 > 24 >14

$$\therefore \quad \frac{42}{63} > \frac{24}{63} > \frac{14}{63}$$

$So, \frac{2}{3}, \frac{8}{21}, \frac{2}{9}$ **Is the required descending order.**

Questions for practice:-

Q1.Evaluate the following:

$(i)\ 4 + \frac{7}{8}$ $(ii)\ \frac{2}{3} - \frac{1}{5}$ $(iii)\ 4 - \frac{5}{7}$ $(iv)\ \frac{9}{11} - \frac{4}{15}$

$(v)\ 2\frac{2}{3} + 3\frac{1}{2}$ $(vi)\ \frac{7}{10} + \frac{2}{5} + \frac{3}{2}$ $(vii)\ 5 + \frac{1}{2} - \frac{1}{3} + \frac{1}{4}$ $(viii)\ 6\frac{3}{2} - 7\frac{1}{2}$

Q2. Arrange the following fractions in descending order:

(i) $\frac{1}{5}, \frac{3}{7}, \frac{7}{10}$

(ii) $\frac{5}{4}, \frac{7}{8}, \frac{11}{16}$

Q3. Arrange the following fraction in ascending order:

(i) $\frac{15}{16}, \frac{17}{18}, \frac{11}{12}$

(ii) $\frac{13}{27}, \frac{17}{35}, \frac{13}{36}, \frac{12}{25}$

Q4. Express the following mixed fraction as improper fraction:

(i) $241\frac{6}{7}$

(ii) $154\frac{9}{11}$

Q5. A rectangular sheet of paper is 12 $^{1}/_{2}$ cm long and 10 2/3 cm wide. Find its perimeter [Hint: - perimeter of rectangle 2 (l + b)]

Q6. Sameer purchased 3 $^{1}/_{2}$ kg apples and 4 $^{3}/_{4}$ kg guavas.What is total weight of fruits purchased by her?

Q7.A square sheet of paper having its side 7 $^{3}/_{4}$ cm .Find its perimeter.
[Hint: - perimeter of square 4 x side]

Q8. Jaishree studies for $5\frac{2}{3}$ hours daily. She devotes $2\frac{4}{5}$ hours of her time for science and mathematics. How much time does she devote for other subject?

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